

**REMARKS/ARGUMENTS**

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 1 - 5, 7 - 10, 14 - 30, 33, and 35 - 55 are pending in the application. Currently, claims 18 - 20, 22 - 30, and 35 - 44 have been allowed; claims 1 - 5, 8 - 10, 14 - 17, 21, 33, and 45 - 55 were rejected; and claim 7 was objected to.

By the present amendment, claims 1, 7, 21, and 46 have been amended.

In the office action mailed May 26, 2006, an objection was made to claim 21 as being an improper dependent claim. Appropriate correction has been made.

Further, in said office action, claim 46 was rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,844,075 to Saak et al.; claims 1 - 5 and 8 - 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,025,078 to Rickerby et al. in view of U.S. Patent No. 6,258,467 to Subramanian et al. and U.S. Patent No. 6,607,852 to Spitsberg et al.; claims 45, 47, 48, and 54 - 55 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rickerby et al. in view of Subramanian et al. and Spitsberg et al. and further in view of U.S. Patent Application No. 2003/0138641 to Fukudome et al.; claims 45 and 50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rickerby et al. in view of Subramanian et al. and Spitsberg et al. and further in view of U.S. Patent No. 5,985,470 to Spitsberg et al.; claims 45 and 49 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rickerby et al. in view of Subramanian et al. and Spitsberg et al. and further in view of U.S. Patent Application No. 2002/0028941 to Lane et al.; claims 45, 49, and 51 were rejected

under 35 U.S.C. 103(a) as being unpatentable over Rickerby et al. in view of Subramanian et al. and Spitsberg et al. and further in view of U.S. Patent No. 5,863,668 to Brindley et al.; and claims 45, 51, 52, and 53 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rickerby et al. in view of Subramanian et al. and Spitsberg et al. and further in view of U.S. Patent No. 5,572,725 to Morris et al.

The foregoing rejections are traversed by the present response.

With respect to the rejection of claim 46 on anticipation grounds over Saak et al., this claim is allowable because Saak et al. does not teach or suggest a bond coat layer consisting of  $Ta_2O_5$ . The bond coat in Saak et al. is formed from silicon. With respect to the Examiner's comments about Saak, it is inappropriate to ignore the fact that what the Examiner is relying upon is an intermediate layer which is formed on the bond coat. To say this intermediate layer is the bond coat is to ignore the express disclosure in Saak et al. As to the intermediate layer in Saak et al., this layer is formed by at least one of tantalum aluminate and niobium aluminate. It is not  $Ta_2O_5$ . It is well settled law that in order to anticipate a claim, a reference must disclose all limitations of the claim either expressly or inherently. Saak et al. does not expressly disclose the claimed bond layer. Also, it does not inherently disclose the claimed bond layer. This rejection should be withdrawn.

With respect to the rejection of claims 1 - 5 and 8 - 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,025,078 to Rickerby et al. in view of U.S. Patent No. 6,258,467 to Subramanian et al. and U.S. Patent No. 6,607,852 to Spitsberg et al., the position taken by the

Examiner with regard to the meaning of the word balance is clearly erroneous. The word "balance" has the same meaning as the word "remainder". It is not an open term as averred to by the Examiner. If the Examiner wishes to maintain this position, the Examiner is hereby requested to cite authority for this position. In Rickerby et al., it is clear that the remainder or the balance is zirconia. In order to clarify that the remainder in the claimed invention is just ceria, Applicant has amended claim 1 that "the balance being ceria." Further, applicant has amended claim 1 to say that the thermal barrier coating consists of at least 15 mol% of at least one lanthanide sesquioxide and the balance being ceria. Rickerby et al. does not disclose such a thermal barrier coating. Neither do Subramanian et al. and Spitsberg et al. Thus, even if the references were combined in the manner suggested by the Examiner, they would not teach or suggest the claimed invention.

Claims 2 - 5 and 8 - 10 are allowable for the same reasons as claim 1 and further on their own accord.

With respect to the various obviousness rejections involving claims 45 and 47 - 55 and the Fukudome et al., Spitsberg et al. '470, Lane et al., Brindley, and Morris et al., these claims are allowable for the same reason as claim 1 as well as on their own accord. None of the Fukudome et al., Spitsberg et al. '470, Lane et al., Brindley, and Morris et al. references do not cure the aforementioned deficiencies of the Rickerby, Subramanian, and Spitsberg '852 references.

Claim 7 has been placed into independent form and thus is now allowable.

For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

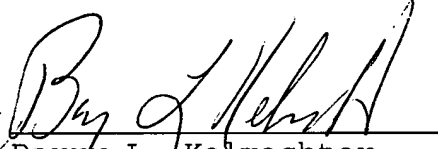
Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, she is hereby invited to contact Applicants' attorney at the telephone number listed below.

The Commissioner is hereby authorized to charge the additional independent claim fee of \$1,400.00 to Deposit Account No. 21-0279. Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to said Deposit Account.

Respectfully submitted,

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I, Karen M. Gill, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on August 28, 2006.

